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ON THE IDENTITY OF THE GENUS *HOMOLOPHUS*: A SENIOR SYNONYM OF *EUPHALANGIUM* (OPILIONES: PHALANGIIDAE)

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Synopsis

Cokendolpher, James C. (Department of Entomology, Texas Tech University, Lubbock, Texas 79409, U. S. A.): On the identity of the genus *Homolophus*: A senior synonym of *Euphalangium* (Opiliones: Phalangiidae). *Acta arachnol.*, **35**: 89-96 (1987).

The rediscovery of the long lost holotype of *Homolophus arcticus* Banks allowed the author to determine the identity of this species, the type for the genus. *Euphalangium* Roewer is a junior synonym of *Homolophus* and all of its currently recognized species are listed in their respective new combinations. The status of species formerly included in *Homolophus* is briefly noted.

The rediscovery of the long lost holotype of *Homolophus arcticus* Banks, 1893, provided the author the opportunity to settle the question of its identity. The holotype, an adult male, was discovered among the George Marx collection of the U. S. National Museum of Natural History. The specimen matches Banks' description in every detail and is labeled in Banks' handwriting "*H. arcticus* Bks". Because the specimen was never labeled as a "type specimen" it was apparently lost among the general collection at the U. S. National Museum of Natural History. I have clearly labeled the specimen as the type so that no future problems will occur.

In 1985, I stated that all *Homolophus* species known to me were members of the Gagrellidae *sensu* Šilhavý (Leiobuninae). At that time I had not seen the type of *H. arcticus*. I have now determined that *Homolophus* is a member of the Phalangiidae *sensu* Šilhavý and that all species, other than *H. arcticus*, previously assigned to that genus are misplaced. *Homolophus arcticus* is here considered a new senior synonym of "*Opilio*" *sachaliensis* SUZUKI, 1941. "*Opilio*" *kurilus* ROEWER, 1956, and "*Opilio*" *sachalinus* ROEWER, 1956, are probably synonyms of *H. arcticus* as well, although I have not examined the types of these species. All three "*Opilio*" species were synonymized with *Euphalangium albofasciatum* by STARĘGA (1964). These synonymies were repeated by SUZUKI and TSURUSAKI (1983). STARĘGA (1978) transferred *O. sachaliensis*, *O. sachalinus*, and *O. kurilus* to the synonomy of *Egaenus zichyi* KULCZYŃSKI, 1901, but stated *Euphalangium albofasciatum* was not a synonym. As the type locality of this latter species lies outside the political boundaries used in STARĘGA's (1978) catalogue, no further mention was made on that species.

Because I have not examined the type of *Egaenus zichyi*, I can not argue the merits of its synonymy with the species from Sakhalin and Kurile Islands. From my examination of other specimens, it is clear that *H. arcticus* is congeneric with the type species of *Euphalangium* (*Phalangium Nordenskiöldi* L. KOCH) and not those of *Egaenus* (*Opilio convexus* C. L. KOCH) or *Opilio* (*Phalangium parietinum* DE GEER). If *E. zichyi* and *H. arcticus* are conspecific, the name of the species will not be altered as *H. arcticus* is the older name.

Species included in the genus *Homolophus*

With the synonymy of *Euphalangium* with *Homolophus*, 14 new combinations result, which are given below. In addition to these described species, several undescribed species of *Homolophus* are known from Tadzhik S. S. R. (U. S. S. R.) and Japan.

Homolophus adungius (ROEWER, 1956), new combination

Distribution. Union of Burma: Upper Burma, Lower Burma (Pegu division).

Comment. MARTENS (1973) first noted that "*Opilio*" *adungius* ROEWER (1956, p. 280) and "*Opilio*" *birmanicus* ROEWER (1956, p. 281) were conspecific. He also stated that they were similar to, but distinct from, "*Euphalangium*" *nepalicum* (ROEWER, 1912).

Homolophus afghanus (ROEWER, 1956), new combination (not *Homolophus afghanus* ROEWER, 1960)

Distribution. Afghanistan: Kabul province.

Comment. When *Euphalangium afghanum* ROEWER, 1956, is transferred to

Homolophus, a secondary homonym is created with *H. afghanus* ROEWER, 1960. Because these two taxa are not congeneric and the latter species is transferred elsewhere in this paper to the genus *Dilophiocara* REDIKORZEV (see "excluded species"), the junior name is not rejected or renamed (I. C. Z. N. Art. 59c).

Homolophus albofasciatus **(KULCZYŃSKI, 1901), new combination**

Distribution. Mongolian People's Republic: Central and South Khangai provinces.

Comment. This species was originally described as *Phalangium Nordenskiöldi* var. *albofasciatum* KULCZYŃSKI and was transferred to *Euphalangium* by ROEWER (1911). The nomenclatural history of this species has been substantially cluttered by STARĘGA (1964, 1978), who synonymized three *"Opilio"* spp. from Sakhalin Oblast, Russian S. F. S. R., with this species. Later, he (1978) synonymized the same three *"Opilio"* spp. (but not *E. albofasciatum*) with *Egaenus zichyi* KULCZYŃSKI, 1901. The identity of *Egaenus zichyi* is unknown to me, but at least one of the *"Opilio"* sp. is conspecific with *H. arcticus,* and all appear to be distinct from *H. albofasciatus.*

Homolophus arcticus **BANKS, 1893**

Distribution. U. S. S. R.: Russian S. F. S. R.: Far Eastern Region, Komandorskiye ostrova and Sakhalin Oblast—Japan: Hokkaidô—North Korea.

Comment. The holotype male of *H. arcticus* was collected on Komandorskiye ostrova and closely matches SUZUKI's (1956) description of the male of *Opilio sachaliensis.* The former specimen is slightly smaller and less tuberculate than a specimen I examined from Hokkaidô, but it is important to remember that the type locality of *H. arcticus* is much further north than Hokkaidô.

The squared-off tip of the thickened penis glans is diagnostic for *H. arcticus,* and the shape of its truncus is also useful in separating it from many other congeners (see SUZUKI, 1956: figs. 5-7 and Tsurusaki, 1987: fig. 4A-D). Comments on synonymies of this species are discussed in the introduction of this paper.

Homolophus betpakdalensis **(GRICENKO, 1976), new combination**

Distribution. U. S. S. R.: Kazakh S. S. R.

Comment. GRICENKO described this species in combination with *Euphalangium*

Homolophus chitralensis **(ROEWER, 1956), new combination**

Distribution. Islamic Republic of Pakistan: North-West Frontier province.

Comment. Roewer originally described this species in combination with *Euphalangium.*

Homolophus nordenskioeldi (L. Koch, 1879), new combination

Distribution. U.S.S.R.: Russian S.F.S.R.—Mongolian People's Republic: Central, South Khangai, and North Khangai provinces—North Korea.

Comment. This species was originally described as *Phalangium Nordenskiöldi* and transferred to *Euphalangium* by Roewer (1911). The alleged finds of this species from eastern Tibet and Karakorum regions represent collections of other species according to Staręga (1978).

Homolophus potanini (Simon, 1895), new combination

Distribution. U.S.S.R.: Tadzhik S.S.R., Kirgiz S.S.R., Kazakh S.S.R.—People's Republic of China: Sinkiang Uighur autonomous region—India: Karakoram range in Jammu and Kashmir.

Comment. Simon (1895) described this species in combination with *Phalangium,* and Staręga (1978) transferred it to *Euphalangium.*

Homolophus przewalskii (Staręga, 1978), new combination

Distribution. U.S.S.R.: Russian S.F.S.R., Kazakh S.S.R.

Comment. Staręga renamed this species because the original name, *Phalangium Nordenskiöldi* var. *pallida* Kulczyński, 1901, was preoccupied.

Homolophus suzukii (Šilhavý, 1972), new combination

Distribution. People's Republic of China: northern Tien Shan.

Comment. Šilhavý originally described this species in combination with *Euphalangium.*

Homolophus thienshanensis (Šilhavý, 1967), new combination

Distribution. U.S.S.R.: Kazakh S.S.R.

Comment. Šilhavý described this species in combination with *Euphalangium.*

Homolophus tibetanus (Roewer, 1911), new combination

Distribution. U.S.S.R.: Uzbek S.S.R.—People's Republic of China: Tibet and Sinkiang Uighur autonomous regions—Nepal—India: Assam.

Comment. MARTENS (1973) transferred *Zacheus nepalicus* ROEWER, 1912, to *Euphalangium* and stated that it was probably the same species as *Egaenus asiaticus* ROEWER, 1914. Later, STARĘGA (1978) transferred *Egaenus tibetanus* ROEWER, 1911, to *Euphalangium* and synonymized *Egaenus asiaticus* with it. STARĘGA (1978) did not mention *Euphalangium nepalicum,* but because he synonymized *E. asiaticus* with *E. tibetanus* it is assumed that *E. nepalicus* is likewise a synonym.

Homolophus trinkleri* (ROEWER, 1956), new combination

Distribution. Afghanistan: Kabul province.

Comment. ROEWER described this species in combination with *Euphalangium.*

Homolophus turcicus* (ROEWER, 1959), new combination

Distribution. Turkey.

Comment. ROEWER described this species in combination with *Euphalangium.* This species description, like others by ROEWER, lacks reference to genital morphology. Because of this and the apparent unavailability of a type specimen (J. GRUBER, per. comm.) this species is only tentatively assigned to *Homolophus.*

Homolophus vladimirae* (ŠILHAVÝ, 1967), new combination

Distribution. U. S. S. R.: Kazakh S. S. R.

Comment. ŠILHAVÝ described this species originally in combination with *Euphalangium.*

Homolophus* sp.

Distribution. Japan: Hokkaidô-District.

Comment. This undescribed species was first reported from one of the small islands off Hokkaidô as a "Phalangiinae sp." (TSURUSAKI, 1985). For the description of this species, see TSURUSAKI (1987).

Homolophus* spp.

Distribution. U. S. S. R.: Tadzhik S. S. R.

Comment. STARĘGA (1978) lists four species of *Euphalangium* (*andreevae, gricenkoi, hissaricum,* and *vernale*) from Tadzhik S. S. R., that were supposed to be described in 1979. All are *nomina nuda,* because the species descriptions by STARĘGA are still not published.

Species excluded from the genus *Homolophus*

Four species have been incorrectly placed in combination with or described in *Homolophus*. They (one of which is a synonym) are now known to belong in separate families *sensu* ŠILHAVÝ: *Homolophus* proper belongs to the Phalangiidae and the four incorrectly placed species belong to the Gagrellidae. COKENDOLPHER (1985) reported that the New World "*Homolophus*" were not congeneric with the Asian species. Detailed papers on this topic will appear elsewhere, but for now the following new combinations should be noted.

Dilophiocara afghana **(ROEWER, 1960), new combination**

Distribution. Democratic Republic of Afghanistan: Bâmiân province.

Comment. ROEWER (1960) described this species as *Homolophus afghanus*. Because this species is no longer retained in *Homolophus*, it is not rejected as a secondary homonym of *Homolophus afghanus* (ROEWER, 1956)—see under "Included species".

Microliobunum iranum **(ROEWER, 1952a), new combination**

Distribution. Islamic Republic of Iran: Kerman province.

Comment. This species was originally described in combination with *Homolophus* by ROEWER, 1952a.

Togwoteeus biceps **(THORELL, 1877), new combination**

Distribution. West-central regions of U. S. A. and Canada.

Comment. *Mitopus biceps* THORELL, 1877, was transferred to *Homolophus* by BANKS (1894). BANKS (1901) synonymized *Homolophus punctatus* BANKS, 1894, and LEVI and LEVI (1955) synonymized *Togwoteeus granipalpus* ROEWER, 1952b, with *H. biceps*. These synonymies were upheld by COKENDOLPHER (1985).

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摘　　要

COKENDOLPHER, James C. (Department of Entomology, Texas Tech University, Lubbock, Texas 79409, U. S. A.): *Homolophus* 属の正体: *Euphalangium* の古参シノニム（ザトウムシ目：マザトウムシ科）。

長らく属・種ともに正体の不明であった *Homolophus arcticus* BANKS の完模式標本が再発見され，検討の結果，ROEWER の創設した *Euphalangium* 属は *Homolophus* 属の新参シノニムとされるのが妥当との結論に達した。従来，*Euphalangium* のもとに扱われ，今回，*Homolophus* に移される全種をリストアップした。また，これまで *Homolophus* に入れられていたが，この処置により本属から除外される種の地位についても言及した。

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